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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/170,724	10/14/1998	TAKASHI NAKATSUYAMA	7217/57094	7105

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EXAMINER	
GAUTHIER, GERALD	
ART UNIT	PAPER NUMBER
2645	

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary	Application No.	Applicant(s)	
	09/170,724	NAKATSUYAMA, TAKASHI	
	Examiner	Art Unit	
	Gerald Gauthier	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-24 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 6, 9, 15, 21 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Yurt et al. (US 5,132,992).

Regarding **claim 1**, Yurt discloses an audio and video transmission and receiving system (column 3, lines 61-64), (which reads on claimed "a data distribution system") including a transmission system (100 on FIG. 1), (which reads on claimed "an information service center") and a reception system (200 on FIG. 1), (which reads on claimed "terminal equipment") remote from the information service center (column 4, lines 5-7) and adapted for distributing a program selected (column 4, line 6) at the terminal equipment from the information service center to the terminal equipment, the information service center comprising:

storage means (column 5, lines 67-68 "material library means") for storing a plurality of programs (column 5, line 66 to column 6, line 2);

retrieving means (column 6, line 39 "identification encoder") for retrieving a desired program selected at the terminal equipment from the plurality of programs stored in the storage means (column 6, lines 35-39) [Each item has a unique identification code for storage and retrieving purpose];

dividing means (column 7, line 6 "formatter") for dividing the desired program retrieved by the retrieving means into an outline part (column 7, line 8) for informing a user of an outline of the desired program and into a supplement part (column 7, line 9) recombinable with the outline part for restoring the desired program (column 7, lines 4-11) [The formatter divides the desired items into part the audio part and the video part to be recombined at the user terminal]; and

time-division transmission means (column 7, line 63 "time encoder") for time-division transmission of the outline part and the supplement part divided by the dividing means (column 7, line 59 to column 8, line 6) [The time encoding does the time-division of the audio and the video information to be realigned at the user terminal]; and

the terminal equipment comprising:

receiving means (column 18, line 4 "transceiver") for receiving the outline part and the supplement part transmitted from the information service center (column 18, lines 1-8) [The reception system receives the audio and the data information from the transmitter system];

recombining means (column 18, line 23 "data formatter")for recombining the outline part and the supplement part received by the receiving means (column 18, lines 22-35) [The data formatter converts the data in format suitable for playback]; and

reproducing means (column 18, lines 36-37 "playback system") for reproducing the desired program based on the outline part used for monitoring (column 18, lines 36-45) [The reproducing means of the audio and video data is done at the playback system in real time].

Regarding **claims 6 and 21**, Yurt discloses when the supplement part from the information service center begins downloading into the terminal equipment, the outline part is continuously reproduced for monitoring by the user (column 14, line 64 to column 15 line 2).

Regarding **claim 9,** Yurt discloses all the limitations on **claim 9**, as stated on **claim 1** rejection.

Regarding **claim 15,** Yurt discloses all the limitations on **claim 15**, as stated on **claim 1** rejection.

Regarding **claim 24,** Yurt discloses all the limitations on **claim 24**, as stated on **claim 1** rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 2, 10 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Kitabatake (US 5,469,474).

Regarding **claims 2 and 10**, Yurt discloses the desired program includes audio data (column 9, lines 26-40).

Yurt as applied to **claims 1 and 9** above differs from **claims 2 and 10** in that it fails to disclose the dividing and encoding means of the audio data into a plurality of bands having different respective frequency components.

However, Kitabatake teaches

an audio data dividing means for dividing the audio data into a plurality of bands having different respective frequency components (see 11 on FIG. 2); and

encoding means for encoding a frequency component of each of the bands resulting from a division of the audio data by the audio data dividing means by allocating a quantization bit to each one of the frequency components for masking a quantum noise, for providing as the outline part an output corresponding to a first band of the plurality of bands, and for providing as the supplement part an output corresponding to a second band of the plurality of bands (see column 5, line 67 to column 6, line 8).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding the dividing and encoding means of the audio data into a plurality of bands having different respective frequency components as taught by Kitabatake.

The modification will allow the system to divide the audio data into a plurality of bands having different respective frequency components such that the frequency band signals would be quantized.

Regarding **claim 16**, Yurt discloses the program includes audio data (column 9, line 26-40).

Yurt as applied to **claim 15** above differs from **claim 16** in that it fails to disclose dividing the audio data into a plurality of bands having a frequency component and a first output.

However, Kitabatake teaches the audio data is divided into a plurality of bands having different respective frequency components;

a frequency component of each of the bands results from a division of the audio data encoded by allocating a quantization bit to each one of the frequency components for masking a quantum noise (see column 4, lines 24-33); and

a first output corresponding to a first band of the plurality of bands is provided as the outline part while a second output corresponding to a second band of the plurality of bands is provided as the supplement part (see column 4, lines 18-23).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding dividing the audio data into a plurality of bands having a frequency component and a first output as taught by Kitabatake.

The modification will allow the system to divide the audio data into a plurality of bands having different respective frequency components such that the frequency band signals would be quantized.

5. **Claims 3, 11 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Kim (US 5,734,657).

Regarding **claims 3, 11 and 18**, Yurt discloses the desired program includes audio data (column 9, lines 26-40).

Yurt as applied to **claims 1, 9 and 15** above differs from **claims 3, 11 and 18** in that it fails to disclose the dividing means generates outputs through addition of a plurality of channels for the audio data.

However, Kim teaches the dividing means generates a first output through addition of a plurality of channels for the audio data and a second output through subtraction of the plurality of channels, for providing one of the first output and the second output as the outline part and a remaining output as the supplement part (see column 4, lines 39-43).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding the dividing means generates outputs through addition of a plurality of channels for the audio data as taught by Kim.

The modification will allow the system to have the dividing means generates outputs through addition of a plurality of channels for the audio data such that the audio signals would be a sampled digitally.

6. **Claims 4, 12 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Tsutsui et al. (US 5,731,767).

Regarding **claims 4, 12 and 19**, Yurt discloses the desired program includes audio data (column 9, lines 26-40).

Yurt as applied to **claims 1, 9 and 15** above differs from **claims 4, 12 and 19** in that it fails to disclose the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum.

However, Tsutsui teaches the dividing means comprises frequency band dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum for providing one of the even spectrum and the odd spectrum as the outline part and a remaining spectrum as the supplement part (see column 14, line 64 to column 15, line 7).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum as taught by Tsutsui.

The modification will allow the system to have the dividing means for dividing a frequency band of the audio data into an even spectrum and an odd spectrum such that the respective bands would become in correspondence with the critical bandwidths.

7. **Claims 5, 13 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Tsuga et al. (US 5,895,124).

Regarding **claims 5, 13 and 20**, Yurt discloses the desired program includes audio data (column 9, lines 26-40).

Yurt as applied to **claims 1, 9 and 15** above differs from **claims 5, 13 and 20** in that it fails to disclose dividing the audio data into vocal data and accompaniment data.

However, Tsuga teaches the dividing means divides the audio data into vocal data and accompaniment data for providing one of the vocal data and the accompaniment data as the outline part and remaining data as the supplement part (see column 1, line 64 to column 2, line 6).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding dividing the audio data into vocal data and accompaniment data as taught by Tsuga.

The modification will allow the system to divide the audio data into vocal data and accompaniment data such that the user would be able to select a duet.

8. **Claims 7, 8, 14, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Schoen et al. (US 5,592,511).

Regarding **claims 7 and 22**, Yurt as applied to **claims 1 and 15** above differs from **claims 7 and 22** in that it fails to disclose reproduction of the outline part at the terminal equipment for monitoring not counted for billing.

However, Schoen teaches a data distribution system, wherein reproduction of the outline part at the terminal equipment for monitoring is not counted for billing (see column 3, lines 21-30).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding reproduction of the outline part at the terminal equipment for monitoring not counted for billing as taught by Schoen.

The modification will allow the system to have reproduction of the outline part at the terminal equipment for monitoring not counted for billing such that the user would retrieve the data.

Regarding **claims 8, 14 and 23**, Yurt as applied to **claims 1, 9 and 15** above differs from **claims 8, 14 and 23** in that it fails to disclose additional lock data for a predetermined billing.

However, Schoen teaches a data distribution system, wherein the information service center transmits to the terminal equipment the supplement part including additional lock data for a predetermined billing and receives from the terminal equipment key data corresponding to the additional lock data, thereby permitting reproduction of the supplement part at the terminal equipment (see column 3, lines 13-18).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding additional lock data for a predetermined billing as taught by Schoen.

The modification will allow the system to have additional lock data for a predetermined billing such that the billing data would be sent to the computer.

9. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yurt in view of Akagiri (US 5,664,056).

Yurt as applied to **claim 15** above differs from **claim 17** in that it fails to disclose the converting and the second recombining means of the outline part and the supplement part.

However, Akagiri teaches a terminal equipment, further comprising:

converting means for converting frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals (see column 9, lines 23-26); and

second recombining means for recombining converted signals from the converting means for band composition (see column 9, lines 26-29).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Yurt by adding the converting and the second recombining means of the outline part and the supplement part as taught by Akagiri.

The modification will allow the system to convert frequency-axial signals of the outline part and the supplement part respectively distributed from the information service center, to time-axial signals such that the samples on the time axis would be recombined.

Response to Arguments

10. Applicant's arguments with respect to **claims 1-24** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (703) 305-0981. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Gerald Gauthier
g.g.
September 2, 2002

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